

Reply to Office Action dated February 9, 2004

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended): An optical space transmission device for one to plural bi-directional optical communications, comprising:

transmission result detection means for determining, subsequent to a polling sequence which ranks an associated office in an order, if a communication transmission to ~~an~~ the associated office is performed successfully by detecting if a command of a predetermined content is returned from the associated office in response to data transmitted thereto at a predetermined maximum luminous intensity; and

luminous intensity adjusting means for adjusting a subsequent luminous intensity downward based on a successful transmission result of detection being detected by said transmission result detection means.

2. (original): The optical space transmission device as set forth in claim 1, wherein:

said transmission result detection means determines if the command is returned based on a ratio of receiving error of the command.

3. (original): The optical space transmission device as set forth in claim 1, wherein:

said luminous intensity adjusting means is capable of adjusting the luminous intensity at multiple levels in such a manner that a luminous intensity is maximized at a time of

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starting transmission, and as long as the transmission result detection means detects that a transmission is performed successfully, the luminous intensity is reduced by one level, while if the transmission result detection means detects that a transmission is not performed successfully, the luminous intensity is increased by one level, thereby determining a minimum required luminous intensity.

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4. (original): The optical space transmission device as set forth in claim 1, wherein:

the luminous intensity adjusting means adjusts the luminous intensity by increasing or decreasing the drive current of a light emitting element.

5. (previously presented): The optical space transmission device as set forth in claim 1, wherein:

said optical space transmission device can be realized both as a host device and a peripheral device.

6. (original): The optical space transmission device as set forth in claim 1, wherein:

only in its application to a peripheral device with respect to a host device for said optical transmission, said transmission result detection means and said luminous intensity adjusting means are provided.

7. (previously presented): The optical space transmission device as set forth in claim 1, wherein:

said transmission result detection means determines if the detected command is returned based on a wait time for the return

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command.

8. (previously presented) The optical space transmission device as set forth in claim 1, wherein:

said luminous intensity adjusting means adjusts a luminous intensity downward if the detected command is a predetermined content and adjusts the luminous intensity upward if the detected command is not of a predetermined content.

9. (previously presented) The optical space transmission device as set forth in claim 8, wherein:

said luminous intensity adjusting means adjusts a luminous intensity subsequent to the polling sequence.

10. (currently amended) A method for providing bi-directional optical communications in an optical space transmission device for one to plural bi-directional optical communications, comprising:

determining, subsequent to a polling sequence which ranks an associated office in an order, if a communication transmission to ~~an~~ the associated office is performed successfully by detecting if a command of a predetermined content is returned from the associated office in response to data transmitted thereto at a predetermined maximum luminous intensity; and

adjusting a subsequent luminous intensity downward based on a successful transmission result of detecting being detected.

11. (previously presented) The method for providing bi-directional optical communications in an optical space transmission device as set forth in claim 10, wherein:

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said detecting of said command of a predetermined content is based on a ratio of receiving error of the command.

12. (previously presented) The method for providing bi-directional optical communications in an optical space transmission device as set forth in claim 10, wherein:

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said adjusting of the subsequent luminous intensity is done at multiple levels in such a manner that the luminous intensity is maximized at a time of starting transmission, and as long as detecting detects that a transmission is performed successfully, the luminous intensity is reduced by one level, while if detecting detects that a transmission is not performed successfully, the luminous intensity is increased by one level, thereby determining a minimum required luminous intensity.

13. (previously presented) The method for providing bi-directional optical communications in an optical space transmission device as set forth in claim 10, wherein:

said adjusting adjusts the luminous intensity by increasing or decreasing a drive current of a light emitting element.

14. (previously presented) The method for providing bi-directional optical communications in an optical space transmission device as set forth in claim 10, wherein:

said optical space transmission method can be performed both in a host device and a peripheral device.

15. (previously presented) The method for providing bi-directional optical communications in an optical space

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transmission device as set forth in claim 10, wherein:

in its application to a peripheral device with respect to a host device for said optical transmission, said detecting and said luminous intensity adjusting are only provided in the peripheral device.

16. (previously presented) The method for providing bi-directional optical communications in an optical space transmission device as set forth in claim 10, wherein:

Print. said detecting determines if the detected command is returned based on a wait time for the return command.

17. (previously presented) The method for providing bi-directional optical communications in an optical space transmission device as set forth in claim 10, wherein:

said adjusting adjusts a luminous intensity downward if the detected command is a predetermined content and adjusts the luminous intensity upward if the detected command is not of a predetermined content.

18. (previously presented) The method for providing bi-directional optical communications in an optical space transmission device as set forth in claim 10, wherein:

said adjusting adjusts a luminous intensity subsequent to the polling sequence.

19. (currently amended) An optical space transmission device for one to plural bi-directional optical communications, comprising:

a receiving error detecting circuit, the receiving error

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detecting circuit determines, subsequent to a polling sequence which ranks an associated office in an order, if a transmission to an the associated office is performed successfully by detecting if a command of a predetermined content is returned from the associated office in response to data transmitted thereto at a predetermined maximum luminous intensity; and

a control section, the control section adjusts a subsequent luminous intensity downward based on a successful transmission result ~~of detection~~ being detected by said receiving error detecting circuit.
